### THE NAUTILUS.

Of 58 "43 or 74.1 per cent. have gr. diam. 24 mm., and over. Of 26 stearnsiana 12 or 46.1 per cent. have gr. diam. 23 to 24 mm. Of 26 "21 or 80.7 per cent. have gr. diam. 24 mm. and under.

Of 58 kellettii 56 or 96.5 per cent. have whorls 5 to 5 +.

Of 26 stearnsiana 19 or 73.1 per cent. whorly  $5\frac{1}{2}$  to  $5\frac{3}{4}$ .

A series of 31 *kellettii*, selected by Hemphill to show variation in size, shape and color, but not included in above lot, are from  $20\frac{1}{2}$  to 31 mm. gr. diam., whorls  $4\frac{1}{2}$  to  $5\frac{1}{3}$ ; 23 or 74.2 per cent.; one 24 mm. and over and 18 or 58.6 per cent. have 5 to 5 + whorls.

Summing up: *E. kellettii* is the species found on Santa Catalina Island, having a large embryonic shell with *smooth* whorls, surface of all the later whorls faintly granulated; generally *over* 24 mm., greatest diam.; whorls 5. (On the mainland at Pt. Vincent, Los Angeles Co., Hemphill found dead shells which agree exactly with those from Santa Catalina, but could find none alive). *E. stearnsiana* is confined to the mainland and the islands of Lower California. Embryonic shell smaller, sculptured with *wary* lines giving it a granulated appearance, remaining whorls *smooth* except for lines of growth and sometimes faint revolving lines; greater diam. generally under 24 mm., whorls  $5\frac{1}{2}$  to  $5\frac{3}{4}$ .

There is a wide variation in size, color and shape in both species and a number of the forms of *kellettii* have been named by Hemphill. Measurements below show largest, smallest, most elevated and most depressed of 89 *kellettii* and 26 *stearnsiana* in my collection.

E. kellettii, largest,  $31 \ge 26 \ge 23$  mm. whorle  $5\frac{1}{4}$ .

" smallest,	$20\frac{1}{2} \ge 17\frac{1}{2} \ge 16\frac{1}{2}$	mm. whorls $-5$ .
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- "elevated,  $26 \ge 23\frac{1}{2} \ge 25$  mm, whorle  $5\frac{1}{2}$ .
- " depressed,  $26 \ge 21 \ge 18$  mm. whorle 5.

E. stearnsiana, largest,  $25\frac{1}{2} \ge 22 \ge 21\frac{1}{2}$  mm. whorls 6.

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- " smallest,  $20 \ge 17 \ge 15\frac{1}{2}$  mm. whorle 5 +.
  - elevated,  $21 \ge 20\frac{1}{2} \ge 20\frac{1}{2}$  mm. whorle  $5\frac{1}{2}$ .
  - depressed, 23 x  $19\frac{1}{2}$  x 16 mm. whorls  $5\frac{1}{2}$ .

# MOLLUSKS OF OKLAHOMA.

## BY JAS. H. FERRISS.

Few if any shells have been recorded from Oklahoma territory. No state or territory in the Union has figured so little in concholo-

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gical literature. In 1897 I collected a few hours in Oklahoma City, obtaining the following species : Polygyra texasiana (Moric). Planorbis bicarinatus (Say). Polygyra monodon (Rack.). Planorbis parvus (Say). Helicodiscus lineatus (Say). Physa sp. Zonitoides minuscula (Binn.). Lampsilis anodontoides (Lea). Zonitoides arborea (Say). Lampsilis purpuratus (Lam.). Lampsilis gracilis (Bar.). Zonitoides nitida (Müll.). Lampsilis parvus (Lea). Euconulus fulvus (Müll.). Quadrula lachrymosa (Lea). Strobilops affinis (Pils.). Pupoides marginatus (Say). Quadrula pustulosus (Lea). Bifidaria armigera (Say). Tritogonia tuberculata (Bar.). Symphynota complanata (Bar.). Bifidaria contracta (Say). Lymnæa probably techella(Hald.). Sphærium sp. Planorbis trivolvis (Say). Pisidium sp.

#### NEW SPECIES OF PISIDIUM.

### BY V. STERKI.

*Pis. minusculum*, n. sp. Mussel minute, slightly oblique, medium inflated; superior margin short, moderately curved, bounded by slightly projecting, rounded angles; supero-anterior and posterior slopes little curved or straight, posterior end rounded, anterior a rounded angle situated much below the median longitudinal line, inferior margin rather well curved; beakes slightly posterior, rather large, rounded or somewhat flattened, moderately projecting over the hinge margin; surface with very fine, slight striæ, somewhat shining, color pale horn, shell translucent; hinge rather stout, cardinal teeth: the right strongly curved, its posterior part much thicker and grooved, left anterior rather short, well curved, the posterior longer, oblique, curved; "laterals" strong, the outer ones in the right valve well formed; ligament, short, thick.

Long. 2.2, alt. 1.8, diam. 1.5 mill.

Habitat: Fox river, Wisconsin, collected by the late Geo. H. Marston; types in the collection of the University of Wisconsin and that of the Carnegie Museum.

A number of specimens of this little *Pisidium* was received in 1895 and then recognized as a new species, and again in 1904, when